IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1-17. (Canceled)

18. (Currently Amended) A recording apparatus comprising:

an extractor operable to extract a program clock reference from a received transport stream;

a clock generator operable to generate an external clock signal synchronized with said program clock reference;

a time-stamp generator operable to generate an arrival time stamp corresponding to a time of receipt of a transport packet in synchronization with said external clock signal;

a formatting unit operable to add said arrival time stamp to the transport packet; ~~and~~

an information generator operable to generate information representative of a transport packet corresponding to discontinuity of the added arrival time stamps in the transport stream; and

a recording unit operable to store said transport packet that includes the added arrival time stamps and the information corresponding to discontinuity of the added arrival time stamps on a storage medium;

wherein when said arrival time stamp located in said storage medium is discontinuous, ~~output~~ time of receipt timing outputs of the transport packet ~~is~~ received from said information generator are controlled in accordance with the discontinuity information.

19-21. (Canceled)

22. (Currently Amended) A recording apparatus comprising:

a time-stamp generator operable to generate a sequential time stamp corresponding to a time of receipt in response to an external clock;

a formatting unit operable to add said time stamp indicating arrival time of each transport packet to the transport packet;

an information generator operable to generate information indicative of positional information of the transport packet corresponding to discontinuity of the added time stamps; ~~and~~

a recording unit operable to record said positional information along with the input transport packet; and

~~wherein when said time stamp is discontinuous, output timing of the transport packet is controlled in accordance with the discontinuity information.~~

a recording unit operable to store said transport packet that includes the added arrival time stamps and the information corresponding to discontinuity of the added arrival time stamps on a storage medium;

wherein when the arrival time stamp located in said storage medium is discontinuous, time of receipt timing outputs of the transport packet received from said information generator are controlled in accordance with the discontinuity information.

23. (Previously Presented) The recording apparatus according to claim 22, wherein a recording control circuit stores a playback management file of an original playback path corresponding to a transport stream in a storage media unit.

24. (Previously Presented) The recording apparatus according to claim 23, wherein said playback management file includes file names, times and addresses of an edited playback path and locations or points of time at each of which discontinuity of time stamps is generated.

25. (Canceled)

26. (Currently Amended) A recording apparatus comprising:

a time-stamp generator operable to generate an arrival time stamp corresponding to a time of receipt indicative of arrival time of a received transport packet in synchronization with an external clock signal;

a formatting unit operable to add said arrival time stamp to the received transport packet; ~~and~~

an information generator operable to generate information indicating a discontinuity of the generated arrival time stamp in the transport stream; and

~~wherein when said arrival time stamp is discontinuous, output timing of the transport packet is controlled in accordance with the discontinuity information.~~

a recording unit operable to store said transport packet that includes the added arrival time stamps and the information corresponding to discontinuity of the added arrival time stamps on a storage medium;

wherein when the arrival time stamp located in said storage medium is discontinuous, time of receipt timing outputs of the transport packet received from said information generator are controlled in accordance with the discontinuity information.

27. (Previously Presented) The recording apparatus according to claim 26, wherein a recording control circuit stores a playback management file of an original playback path corresponding to a transport stream in a storage media unit.

28. (Previously Presented) The recording apparatus according to claim 27, wherein said playback management file includes file names, times and addresses of an edited playback path and locations or points of time at each of which discontinuity of time stamps is generated.

29. (Canceled)

30. (Currently Amended) A method for recording, comprising the steps of:

extracting a program clock reference from a received transport stream;

generating an external clock signal synchronized with said program clock reference;

generating an arrival time stamp corresponding to a time of receipt of a transport packet in synchronization with said external clock signal;

formatting to add said arrival time stamp to the transport packet;

generating information representative of a transport packet corresponding to discontinuity of the added arrival time stamps in the transport stream by using an information generator; and

~~controlling when said arrival time stamp is discontinuous, output timing of the transport packet in accordance with the discontinuity information.~~

recording on a recording unit operable to store said transport packet that includes the added arrival time stamps and the information corresponding to discontinuity of the added arrival time stamps on a storage medium;

wherein when said arrival time stamp located in said storage medium is discontinuous, time of receipt timing outputs of the transport packet received from said information generator are controlled in accordance with the discontinuity information.

31. (Currently Amended) ~~A~~ The method according to claim 30,

wherein a recording control circuit stores a playback management file of an original playback path corresponding to a transport stream in a storage media unit.

32. (Currently Amended) ~~A~~ The method according to claim 31,

wherein said playback management file includes file names, times and addresses of an edited playback path and locations or points of time at each of which discontinuity of time stamps is generated.

33. (Canceled)

34. (Currently Amended) A method for recording, comprising the steps of:

generating a sequential time stamp corresponding to a time of receipt in response to an external clock;

formatting to add said time stamp indicating arrival time of each transport packet to the transport packet;

generating information indicative of positional information of the transport packet corresponding to discontinuity of the added time stamps by using an information generator; ~~and~~

recording said positional information along with the input transport packet; and

~~controlling when said time stamp is discontinuous, output timing of the transport packet in accordance with the discontinuity information.~~

recording on a recording unit operable to store said transport packet that includes the added arrival time stamps and the information corresponding to discontinuity of the added arrival time stamps on a storage medium;

wherein when the arrival time stamp located in said storage medium is discontinuous, time of receipt timing outputs of the transport packet received from said information generator are controlled in accordance with the discontinuity information.

35. (Currently Amended) ~~A~~ The method according to claim 34,

wherein a recording control circuit stores a playback management file of an original playback path corresponding to a transport stream in a storage media unit.

36. (Currently Amended) ~~A~~ The method according to claim 35,

wherein said playback management file includes file names, times and addresses of an edited playback path and locations or points of time at each of which discontinuity of time stamps is generated.

37. (Canceled)

38. (Currently Amended) A method for recording, comprising the steps of:

generating an arrival time stamp indicative of an arrival time corresponding to a time of receipt of a received transport packet in synchronization with an external clock signal;

formatting to add said arrival time stamp to the received transport packet; ~~and~~

generating information indicating a discontinuity of the generated arrival time stamp in the transport stream by using an information generator; and

~~controlling when said arrival time stamp is discontinuous, output timing of the transport packet in accordance with the discontinuity information.~~

recording on a recording unit operable to store said transport packet that includes the added arrival time stamps and the information corresponding to discontinuity of the added arrival time stamps on a storage medium;

wherein when the arrival time stamp located in said storage medium is discontinuous, time of receipt timing outputs of the transport packet received from said information generator are controlled in accordance with the discontinuity information.

39. (Currently Amended) ~~A~~ The method according to claim 38,

wherein a recording control circuit stores a playback management file of an original playback path corresponding to a transport stream in a storage media unit.

40. (Currently Amended) ~~A~~ The method according to claim 39,

wherein said playback management file includes file names, times and addresses of an edited playback path and locations or points of time at each of which discontinuity of time stamps is generated.

41-43. (Canceled)

44. (Currently Amended) A recording medium for recording a plurality of data streams, said plurality of data streams being recorded in accordance with the steps of:

extracting a program clock reference from a received transport stream;

generating an external clock signal synchronized with said program clock reference;

generating an arrival time stamp corresponding to a time of receipt of a transport packet in synchronization with said external clock signal;

formatting to add said arrival time stamp to the transport packet;

generating information representative of a transport packet corresponding to discontinuity of the added arrival time stamps in the transport stream by using an information generator; and

~~storing said information representative of said transport packet corresponding to said discontinuity of the added arrival time stamps in the transport stream.~~

recording on a recording unit operable to store said transport packet that includes the added arrival time stamps and the information corresponding to discontinuity of the added arrival time stamps on a storage medium;

wherein when the arrival time stamp located in said storage medium is discontinuous, time of receipt timing outputs of the transport packet received from said information generator are controlled in accordance with the discontinuity information.